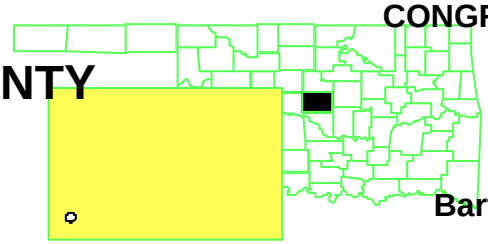
DOUBLE EAGLE REFINERY
OKLAHOMA COUNTY
OKLAHOMA

EPA ID# OKD007188717
Site ID: 0601029

EPA REGION 6
CONGRESSIONAL DISTRICT 5



Contact:
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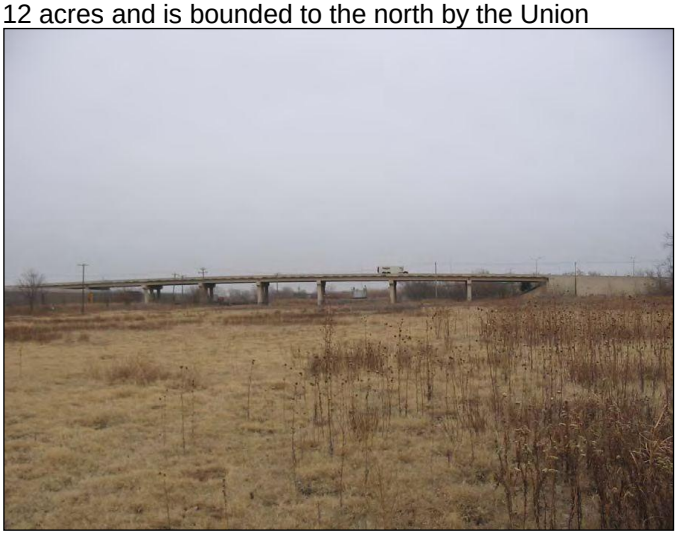
Updated: December 2012

Background

The Double Eagle Superfund is located at 301 N Rhode Island, Oklahoma County, Oklahoma City, Oklahoma. The site extends over approximately 12 acres and is bounded to the north by the Union Pacific Railroad tracks and to the east and west by vacant lots zoned for industrial land use. A "Pilot Truck Stop" operates to the south. Martin Luther King Boulevard lies on the east side of the site. The Double Eagle site collected, stored, and re-refined used oils and distributed the recycled product. The refinery was active as early as 1929. The Double Eagle site recycled approximately 500,000 to 600,000 gallons of used motor oil per month into finished lubricating oil. The recycling process consisted of the addition of sulfuric acid, settling, and filtration with bleaching clays via a filter press. This process generated approximately 80,000 gallons of oily sludge per month. Sludges were initially sent to an off-site disposal facility. Later, sludges were disposed of in on-site impoundments and a sludge lagoon until the late 1960's to early 1970's. Double Eagle continued to accept waste oil for storage in on-site storage tanks until 1980.



Although industrial areas surround the sites, the land use within a 1-mile radius of both sites is mixed industrial and residential. A small neighborhood is located about ¼ mile to the northwest. Four schools and two recreational facilities are located within a 1-mile radius of the sites. Within a 1-mile radius of the sites are many commercial and small industrial facilities. 1,750 people live within one mile of the site. The Double Eagle site is not being re-used at this time. The site is owned by private land owners.

The Double Eagle site was found to be contaminated with metals and organic contaminants in the soil and ground water. Also it contained acidic sludges found in on-site lagoons or pits. Most of the equipment was contaminated to various degrees. The chemicals of concern (COCs) for the Source Control OU included polycyclic aromatic hydrocarbons, chlorinated hydrocarbons and polychlorinated biphenyls, alkyl benzenes, ketones, lead, arsenic, and antimony. Lead was considered the primary COC. The ground water OU under the sites was contaminated with similar COCs to the Source Control OU

In 1989 a fence was constructed and warning signs posted around areas of contamination for the Double Eagle Refining Company site.

The ROD for the Double Eagle Source Control OU was signed on September 28, 1992. The remedy

selected included Neutralization, Excavation, On-site Stabilization, and Off-site Landfill Disposal. The ROD for Groundwater OU was signed on April 19, 1994 and called for groundwater monitoring upon completion of source removal.

Approximately 143,465 cubic yards of waste material were hauled and disposed at the East Oak Landfill.

The site was deleted from the National Priorities List on August 21, 2008.

Current Status

The Oklahoma Department of Environmental Quality (ODEQ) has completed several sampling events of the groundwater. Results show that natural attenuation is taking place through the generation or transformation of related products from the original contaminants. Further investigations conducted by ODEQ and the U.S. Geological Survey (USGS) confirmed that soil conditions are adequate to support the natural attenuation process and the process is taking place. The ODEQ and the USGS have noted that the high levels of sodium, total dissolved solids and chlorides (saltwater or brine) in waters of the upper aquifer make this a Class III or non-potable aquifer. Brine contamination from historic activities associated with oil and gas production in the area has degraded the water quality to such an extent that these aquifers will never meet the criteria for potable water.

The ODEQ and EPA continue to monitor the site by conducting Five-Year reviews to verify that the remedy is protective of human health and the environment. A review was completed in May 2007. The ODEQ submitted the draft report for the 2012 review and the report was finalized in May 2012.

In 2008 the ODEQ and EPA prepared a deletion package for this site. A Notice of Intent to Delete was published in the Federal Register on June 13, 2008. The public comment period closed July 14, 2008. One adverse comment was received, a withdrawal notice of the deletion was published in the Federal Register and EPA prepared a response to comments. The site was deleted August 21, 2008.

Benefits

The selected remedy for the Double Eagle site neutralized and stabilized approximately 44,193 cubic yards of contaminated sludge to protect approximately 32,000 people living within three miles of the site. Approximately 143,465 cubic yards of waste material were hauled and disposed at the East Oak Landfill.

National Priorities Listing (NPL) History

Proposed Date	June 24, 1988
Final Date	March 31, 1989

Location: - Northeast Oklahoma City, Oklahoma
- Two blocks southwest of the intersection of Eastern Avenue (Martin Luther King Blvd.) and NE Fourth Street, bordered by the Atchison, Topeka and Santa Fe (ATSF) Railroad

to the north.

Population: - Approximately 1,750 people live within one mile of the site.
- Approximately 32,000 people live within three miles of the site.

Setting: - Located in an industrial area of the city, southwest of the Fourth Street Abandoned Refinery Superfund site.
- One-half mile southwest of Douglas High School, one-quarter mile south of a residential area.

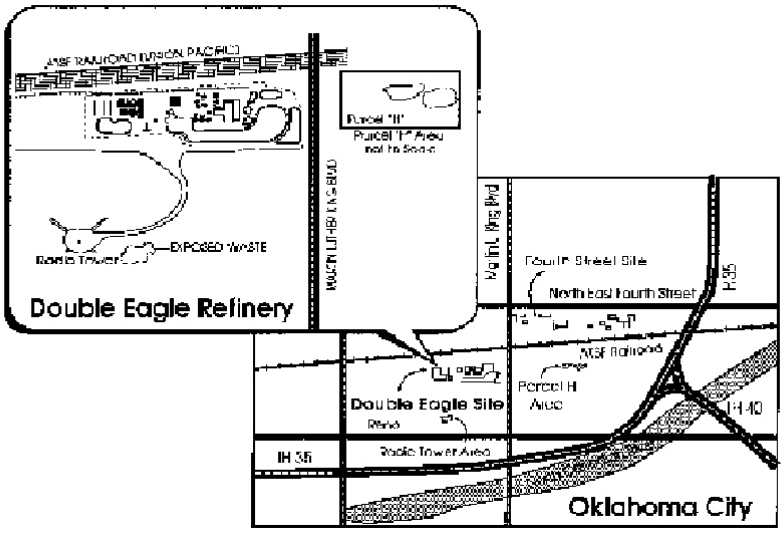
Photos: Site Photo 2007

Principal Pollutants:

- Lead up to 13,300 ppm (sludge)
- Xylene (t) up to 48 ppm (soil/sediment.)
- Ethlybenzene up to 10 ppm (soil/sediment.)
- Trichloroethane 20 ppm (soil/sediment.)

(ppm = parts per million)

Site Map



Health Considerations

- Direct contact threats from lead contaminated sludge and soil.

Record of Decision (ROD)

Signed:
September 28, 1992 (Source), OU No. 1
April 19, 1994 (Ground water), OU No. 2

- The Source Control Record of Decision (ROD) calls for on-site stabilization and disposal in an off-site landfill permitted for non-hazardous wastes.

- The Groundwater ROD calls for groundwater monitoring upon completion of source removal.

Other Remedies Considered	Reason Not Chosen
1. No Action/Limited Action	Will not address all risks.
2. On-site stabilization and Capping	Not considered permanent due to possible failure of cap.
3. On-site stabilization, Onsite Disposal	Was the recommended alternative but State preferred the more economical off-site disposal.
4. On-site Incineration, Onsite capping of ash	Does not address metals (primary risk)
5. Off-site Incineration, off site Disposal	does not address metals (primary risk)

Other Remedies Considered	Reason Not Chosen
1. No Action	Will not provide for protection of lower ground water.
2. Pump and Treat	Will not reduce overall risk due to possible off-site source and high dissolved solids.

Contacts

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